

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 **Claim 1 (Currently amended):** A method for constructing
- 2 a superconducting cable comprising N phases, the method
- 3 comprising the steps of
- 4 - providing each phase in the cable in the form of
- 5 a number of phase conductors,
- 6 - classifying the phase-conductors in N-phase
- 7 groups, each N-phase group comprising a phase conductor
- 8 from each of the N different phases, where N is greater
- 9 than one, and where the number of N-phase groups is larger
- 10 than or equal to two,
- 11 - arranging insulation means in the cable around
- 12 each phase conductor or between assemblies of phase
- 13 conductors, and providing that said N-phase groups are
- 14 electrically insulated from each other, and
- 15 - providing the N-phase groups or assemblies of N-
- 16 phase groups with a common electrically conductive
- 17 electrical screen.

- 1 **Claim 2 (original):** A method according to claim 1,
- 2 wherein the individual phases only contain superconducting
- 3 cable wire and an insulation system.

1 **Claim 3 (original):** A method according to claim 1 or
2 wherein the N-phase groups are arranged in a number of
3 coaxial groups, either with several different phase
4 conductors corresponding to different phases in each
5 coaxial layer or with each individual phase conductor of a
6 particular phase in a separate coaxial layer.

1 **Claim 4 (original):** A method according to claim 1 or
2 wherein the N-phase groups or each of the assemblies of
3 N-phase groups are arranged so that the phase conductors
4 form N flat phases.

1 **Claim 5 (original):** A method according to claim 1 or
2 wherein each of the phases is constructed by one or
3 several individual conductors such as tapes.

1 **Claim 6 (currently amended):** A method according to
2 claim 1, wherein all N-phase groups are gathered in one
3 assembly which is surrounded by ~~one~~ the common electrical
4 screen.

1 **Claim 7 (original):** A method according to claim 6,
2 wherein the N phases are arranged concentrically with
3 concentric insulation between each of the N phases.

1 **Claim 8 (original):** A method according to claim 1,
2 wherein the phases in each N-phase group or assembly of N-
3 phase groups are separately and electrically isolated from
4 each other.

1 **Claim 9 (original):** A method according to claim 1,
2 wherein the phases in each N-phase group or assembly of N-
3 phase groups are isolated from each other by a common
4 insulator.

1 **Claim 10 (original):** A method according to claim 1,
2 wherein the number of N-phase groups is larger than 10.

1 **Claim 11 (original):** A method according to claim 1,
2 wherein the electrical screen is kept at 0 potential and
3 consists fully or partially of superconducting, metallic,
4 and semiconducting materials or of a combination of these
5 materials with non-conducting materials and composites and
6 is positioned close to the electrically insulating
7 material.

1 **Claim 12 (currently amended):** A method according to
2 claim 1, wherein the individual phases in each N-phase
3 group or assembly of N-phase groups have such permittivity
4 that they the individual phases co-operate magnetically.

1 **Claim 13 (original):** A method according to claim 1,
2 wherein at least one of the phases is constituted by a
3 neutral conductor.

1 **Claim 14 (currently amended):** A superconducting cable
2 consisting of N phases, wherein each phase in the cable
3 comprises a number of phase conductors, the phase-
4 conductors having been classified into N-phase groups, each
5 N-phase group comprising a phase conductor from each of the
6 N different phases, where N is greater than one, and where
7 the number of N-phase groups is larger than or equal to
8 two, and wherein insulation means have been arranged in the
9 cable around each phase conductor or between assemblies of
10 phase conductors, and so that said N-phase groups are
11 electrically insulated from each other, and one or more of
12 the N-phase groups or assemblies of N-phase groups has/have
13 been provided with a common electrical screen.

1 **Claim 15 (original):** A method according to claim 1,
2 wherein the number of N-phase groups is larger than 100.